

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A circuit arrangement for electronic data processing comprising:
 - at least one non-volatile memory module for storing encrypted data to be protected against unauthorized access;
 - at least one memory module interface logic circuit in electronic communication with the non-volatile memory module; said at least one memory module interface circuit being for addressing the non-volatile memory module, for writing the data to the non-volatile memory module, or for reading out the data from the non-volatile memory module;
 - at least one code Read Only Memory (ROM) module for storing and/or supplying at least one ROM code; and
 - at least one code ROM module interface logic circuit in electronic communication with the code ROM module for addressing the code ROM module and for reading out the ROM code from the code ROM module,
 - wherein the at least one ROM code stored in the code ROM module is used to generate at least one key code for encrypting or decrypting data being written to the non-volatile memory module or data being read from the non-volatile memory module, said at least one ROM code further being used for decrypting ~~a memory module address~~ data coming from a central processing unit (CPU).
2. (Previously Presented) A circuit arrangement as claimed in claim 1, wherein the memory module interface logic circuit comprises at least one en-/decryption logic circuit
 - having at least one key address generation unit for generating a ROM key address using a memory module address coming from the CPU and
 - having at least one key register.
3. (Previously Presented) A circuit arrangement as claimed in claim 1, wherein the code ROM module interface logic circuit comprises at least one multiplexing unit.

4. (Currently Amended) A circuit arrangement as claimed in claim 1, wherein the non-volatile memory module takes the form of

at least one erasable programmable read only memory (EPROM),
at least one electrical erasable programmable read only memory (EEPROM) or
at least one Flash memory.

5. (Previously Presented) A microcontroller, in particular an "embedded security controller", comprising at least one circuit arrangement as claimed in claim 1.

6-16. (Canceled)